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Docket: 70213 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: Marc Stacey Somers

Serial No.: 08/435,072 Art Unit: 1513

Filed: May 8, 1995 Examiner: M. Dixon

For: PROCESS FOR COEXTRUDING A TACKY AMORPHOUS PROPYLENE COPOLYMER COMPOSITION WITH A LOW VISCOSITY POLYOLEFIN AND ARTICLE PREPARED THEREBY



Commissioner of Patents and Trademarks
Washington, D.C. 20231

TRANSMITTAL OF APPEAL BRIEF – 37 CFR 192

Transmitted herewith in triplicate is the Appeal Brief in this application with respect to the Notice of Appeal filed October 8, 1996.

Please charge the appeal fee of $300 to Deposit Account No. 05–0221. The Commissioner is hereby authorized to charge any additional fees under 37 CFR 1.16 and 1.17 which may be required by this paper or credit any overpayment to Deposit Account No. 05–0221. A duplicate copy of this transmittal is enclosed.

Respectfully submitted,

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8 Jan 97
Date

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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on the date below.

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## APPEAL BRIEF

This is an appeal from the decision of the Examiner dated July 8, 1996 finally rejecting Claims 1–7.

## REAL PARTY IN INTEREST

Eastman Chemical Company is the real party in interest.

## RELATED APPEALS AND INTERFERENCES

None.

## STATUS OF CLAIMS

Claims 8–20 are withdrawn from consideration under a restriction requirement. Claims 1–7 stand rejected under 35 U.S.C. section 102(b) as being anticipated by McCoskey et al. (U.S. 5,041,251, Aug. 20, 1991).

## STATUS OF AMENDMENTS

There are no pending amendments after the final rejection.

## SUMMARY OF INVENTION

The present claimed invention is a process for producing non-blocking slats of normally tacky amorphous propylene copolymers. The process entails coextruding the normally tacky amorphous propylene copolymer (molten) with a low viscosity polyolefin such as a polyethylene wax (also molten) forming a core of amorphous propylene copolymer covered with a sheath of polyethylene wax. The coextruded article is cooled, cut (while exposing less than 40 percent of the core) and then coated with a non-tacky powder; thereby, forming non-blocking slats. The normally tacky amorphous propylene copolymer has a needle penetration greater than 70 to less than 100 dmm at 23°C and a Brookfield Thermosel Viscosity below 1000 cP at 190°C.

The applicant has unexpectedly discovered that amorphous propylene copolymers with a particular set of properties can be formed into slats. Prior to the present invention it was not known that tacky amorphous propylene copolymers of low cohesive strength, having a needle penetration of greater than 70 to less than 100 dmm at 23°C and a Brookfield Thermosel Viscosity below 1,000 cP at 190°C could be formed into slats.

## ISSUES

Whether or not claims 1-7 are anticipated by McCoskey et al., U.S. 5,041,251.

## GROUPING OF CLAIMS

Claims 1-7 stand or fall together.

## ARGUMENT

Contrary to the Examiner's allegation McCoskey et al. do not disclose what is required in the present claims. McCoskey et al. disclose something that is very different from what is claimed in the present claims. McCoskey et al. disclose an underwater pelletizing process of producing particles. This process of McCoskey et al. entails extrusion cutting the polyolefin into

particles while in contact with water that contains a non-sticky material. Once the particles are cut in McCoskey et al. the particles are removed from the water and dusted again with a non-sticky material. This process of McCoskey et al. makes a desirable product as pellets but has proved to be an expensive process and the present invention is an improvement thereover that is cheaper and easier when making slats. Although McCoskey et al. may disclose **some** similar steps, **all** the steps are not the same **and are not** in the same order as required in the present claims and these differences cannot simply be ignored, particularly when they make a significant difference in the "manipulative sense".

The process of the present invention requires the **coextrusion** of an amorphous propylene copolymer in a sheath of a non-tacky polyolefin, **i.e. both polymers are molten at or above their ring and ball softening points.** This is like in sausage making with the meat in a sheath, except that in the present claims both the contents and the sheath are formed from the molten state, one inside the other as both materials exit the die. This is more clearly explained in the present specification on pages 9-12. The extruded core and sheath are extruded in strands (not cut) that are then cooled and then cut. The cut slats never need to be separated from the cooling fluid. The exposed cut ends (not coated with the non-tacky sheath) are then dusted with a non-tacky powder. This is very different from what is disclosed in McCoskey et al. and cannot simply be ignored. Therefore, this rejection must be withdrawn.

The differences between what is disclosed in McCoskey et al. and the present claims cannot simply be swept aside.

Also, the Examiner has stated that the above limitations are not claimed. This is not correct, the above explanation of the limitations is the only way one of ordinary skill in the art could view the present claims, particularly while viewing the present specification. **Coextruding** and **sheath** do have some meaning and can't simply be ignored.

## CONCLUSION

In light of the above, the Examiners rejection of claims 1–7 must be reversed and allowance of all claims are respectfully requested.

Respectfully submitted,

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## APPENDIX

### Claims

1. A process for producing non-blocking slats of amorphous propylene copolymer comprising:

(a) providing near the surface of an extrusion die, near or above the ring and ball softening point, an amorphous propylene copolymer composition comprising no more than about 90 weight percent propylene and up to 70 weight percent of an alpha olefin comonomer having 2 to 8 carbon atoms wherein the composition has a needle penetration of greater than 70 to less than 100 dmm at 23°C and a Brookfield Thermosel Viscosity below 1,000 cP at 190°C;

(b) coextruding the above amorphous propylene copolymer composition with a sheath of a low viscosity non-tacky polyolefin having a Brookfield Thermosel Viscosity of 100 to 50,000 cP at 150°C and a needle penetration of less than 20 dmm at 23°C, wherein said sheath is at a concentration of about 1 to 20 weight percent based on the total weight percent of the non-tacky polyolefin and amorphous propylene copolymer;

(c) contacting the coextruded amorphous propylene copolymer and sheath of non-tacky polyolefin onto a surface having a temperature below the ring and ball softening point of the amorphous propylene copolymer;

(d) cutting the coextruded amorphous propylene copolymer and sheath of non-tacky polyolefin below the ring and ball softening point of the amorphous propylene copolymer into slats, wherein the surface area exposed by cutting is

less than 40 percent of the entire slat surface area such that the surface area of the slat that is sheathed in the low viscosity polyolefin is greater than 60 percent; and

(e) coating the cut slats with a non-tacky powder at a concentration of about 1 to 20 weight percent of the total cut slats.

2. The process according to claim 1 wherein the low viscosity non-tacky polyolefin is a polyethylene wax having a Brookfield Thermosel Viscosity of 3,000 to 5,000 cP at 150°C and is at a concentration of about 2 to 10 weight percent based on the total of polyethylene wax and amorphous propylene copolymer.

3. The process according to claim 1 wherein the exposed surface area is less than 30 percent of the total surface area of the cut slats.

4. The process according to claim 3 wherein the exposed surface area is less than 20 percent of the total surface area of the cut slats.

5. The process according to claim 4 wherein the exposed surface area is about 10 percent of the total surface area of the cut slats.

6. The process according to claim 1 wherein said non-tacky powder in (e) is a powdered polyolefin wax compatible with the amorphous propylene copolymer and has a Brookfield Thermosel Viscosity of 100 to 50,000 cP at 150°C.

7. The process according to claim 1 wherein the coextruded amorphous propylene copolymer and low viscosity non-tacky polyolefin is introduced into a cooling fluid after contacting the chilled surface prior to being cut in step (d).